

## **ABSTRACT**

### **SYSTEM, METHOD, AND APPARATUS FOR NON-TRADITIONAL KINEMATICS/TOOLING FOR EFFICIENT CHARGING OF LAPPING PLATES**

[0028] A system for charging lapping plates incorporates the use of individual ceramic inserts that are mounted into a stainless steel frame to form a novel charging tool. The charging tool is rotated clockwise against a counterclockwise rotating tin plate. This configuration performs a rapid diamond impregnation into the plate without scraping off the diamond slurry from the plate. This design uses the diamond material in the plate charging slurry very efficiently. The inserts may be formed from high density ceramic in a round or cylindrical pad-like design. This design allows high pressure contact between the inserts and the tin plate. As a result, the amount of time required to charge a plate is greatly reduced and only a small fraction of the diamond slurry is wasted, thereby producing a higher yield than prior art systems.